

engravings were not of a finer and more careful character. This regret we still feel: the author himself feels it, and expresses a hope in his dedication "that the imperfections of the performance will stand excused with the lovers of the Art, in consideration of the merit of the examples, and the utility of an easy reference to them." We must nevertheless warmly commend the author for the determination, energy, ability, and industry which have enabled him alone and unaided to complete so heavy a task: we sincerely hope that he will find a remunerating sale for his work, and we invite our readers to assist in bringing this about.

#### WREN'S TOWERS AND SPIRES.

Table of Dates and Heights.

STONE SPIRES.	Date.	Height.	Square of Tower.
		ft.	ft. in.
1 St. Bride	1699	230	30 0
2 St. Mary-le-Bow	1680	222	32 0
3 St. Vedast	1697	160	20 0
4 St. Antholin	1684	158	20 0
5 Christ Church	1704	160	23 3
LANTHORNS.			
1 St. Stephen, Walbrook	1676	120	20 0
2 St. Michael Royal	1694	135	20 0
3 St. James, Garlick-street	1683	120	20 3
4 St. Mary Magdalene	1685	86	16 0
5 St. Dunstan in the East	1638	171	20 0
TOWERS.			
1 St. Andrew, Holborn	1704	140	23 0
2 St. Mary, Somerset	1695	120	20 0
3 Allhallows, Watling-street	1697	104	17 6
4 St. George Botolph	1674	72	16 0
5 St. Michael, Cornhill	1672		
6 St. Mary, Abchurch-lane	1711		
7 St. Clement, Eastcheap	1686	88	16 0
8 Allhallows, Lombard-street	1694	105	21 0
9 St. Bartholomew, Exchange	1679		
10 Allhallows, Thames-street	1683	88	22 0
11 St. Dionis Back	1684	101	20 0
12 St. Anne, Blackfriars	1692	80	18 0
13 St. Matthew, Friday-street	1685		
14 St. Olave, Old Jewry	1673		
15 St. Sepulchre, Newgate	1670		
16 St. Mildred, Poultry	1676	73	16 0
17 St. Mary-at-Hill	1672		
18 St. Clement, Strand (left as tower by Wren)	1680		
LEAD SPIRES.			
1 St. Margaret, Poultry	1687	200	22 0
2 St. Swithin, Cannon-street	1679	150	20 0
LEAD LANTHORNS.			
1 St. Magnus, London-bridge	1705	185	30 0
2 St. Peter, Cornhill	1681	141	20 0
3 St. Benet, Gracechurch-street	1685	145	20 0
4 St. Benet, Thames-street	1683	115	16 0
5 St. Benet Fink	1673	97	18 0
6 St. Mary, Abchurch-lane	1686	150	20 0
7 St. Martin, Ludgate	1684	168	22 0
8 St. Margaret, Lothbury	1690	112	18 0
9 St. Mildred, Broad-street	1683	150	18 0
10 St. James, Piccadilly	—	155	24 0
11 St. Edmund the King	1690	136	17 0
12 St. Michael, Queenhithe	1677	110	18 0
13 St. Austin, Watling-street	1695	140	20 0
14 St. Nicholas, Coll. Abbey	1677	120	19 0
15 St. Lawrence, Old Jewry	1667	150	25 0
16 St. Michael, Bassishaw	1679	140	21 0
17 St. Ann and Agnes	1703	95	14 0
18 St. Stephen, Coleman-street	1676		
19 St. Mary, Aldermanbury	1711		
20 St. Michael, Wood-street	1675		

ROYAL ITALIAN OPERA HOUSE.—Mr. F. Gye has commenced the season with judgment and success, and has made the conventional dreariness of the "opera before Easter" a tradition. In *Maria di Rohan*, Sig. Ronconi is able to display his great power as an actor as well as a singer. Ronconi's *Guglielmo Tell* (to which Meyerbeer owes something) has been revived with great splendour and completeness, and has served to introduce a new tenor, Herr Ander, of great capability. Messrs. Grieco and Telbin's beautiful scenery for this opera will be remembered, especially the opening view of a mountainous country with a village in the middle distance, and Tell's cottage in the foreground. Donizetti's *I Martiri* will be given directly after Easter, with a very strong cast; and Spohr's *Faust*, Weber's *Oberon*, and a new opera by M. Jullien, are promised.

#### THE SCIENCE OF RESTORATION.

ARCHITECTURE TO HIS SON.

EVERYTHING has its scientific system. If men would believe this,—if they would act upon their abstract acknowledgment of it,—that there is a reason for everything,—for every possible effect a definite cause (just as definite as when two and two make four) how many mysteries would become clear as noon, and old philosophisms dissipated away like mere fogs as they are!

It was the exquisite conception of the fresh energy of the modern mind under Bacon to affirm this. Ancient sages and mediæval schoolmen had been over and over again, from generation to generation, vexing their heartstrings as to how this slippery egg could be set up on end; and they had made nothing of it,—it every way fell over somehow, do what they would. Poor humanity could make nothing of its world but on the one hand the confusion of the kaleidoscope of nature, and on the other hand the confusion worse confounded of their visionary philosophisms: till at length, in the fulness of time which heaven had prepared for the great renewal of youth, it was revealed in all its marvellousness of simplicity, that *a priori* reasoning must be forsaken for scientific system, for that old philosophisms were foundationless.

Science resolves the confusion of phenomena into system, and resolves the certainty of system into fundamental law; it melts the universal tumult into harmonies, and distills from these harmonies their abstract essences; and the mission of all true philosophy is to search out in this manner the elements of things,—to push step by step into the secret dark strongholds of nature, and light them up for intelligence to look upon, one by one on the long way to the inaccessible Agency. Therefore, when you meet with a thing hard to understand, remember all this. There is always a system, and for that system there are laws. Whatsoever is true has a reason for its truth, and a reason which diligence can discover. *Everything*, I say, has its scientific system.

Now, with this preface in your hand, as it were a magic mirror to look into, descend with me to any question of our particular business, which among other things may arise; for it is the perfection of good philosophy to apply its principles to every-day and very common matters. There arises thus at present a subject to our hand.

#### THE RATIONALE OF RESTORATION.

The indefatigable energy of Mr. Donaldson has already in this session of the Institute brought forcibly forward two separate questions of much interest, to the decision of which he has challenged the profession at large. The first of these questions had the misfortune to be on the wrong side of history, as present fashion goes; so, with the mere remark that it has its scientific system for any one to deduce who will take the pains, let me pass it by. But the second question, as matters go, is eminently fashionable; and as its decision is of great practical moment, let me attempt a search into the scientific system which it possesses, in order to point the way to a decision.

The Royal tombs in Westminster Abbey being in an extremely dilapidated condition, a question of propriety is broached whether something in the way of repair or renovation ought or ought not to be done to them; and, as a previous question, the whole abstract principle of Restoration comes under review.

For the restoration of certain ancient things is at present a favourite principle with us. In the course of ever-changing fashion, our mediæval antiquities, long out of fashion, have now come strongly into fashion, as a matter of fact. Our new buildings are being modelled with infinite care on the mediæval system; and accordingly the numerous edifices of the ancient time itself with which our land abounds are brought into a practical prominence which their dilapidated condition, the consequence of centuries of other fashion, does certainly not suit. What, then, is to be done? This is the question of Restoration.

Now when I allude to the old *a priori* phi-

losophies, you will recollect how one man would try to find an explanation of nature in the elaboration of the idea, as an abstract fundamental, that its first essence was what he might call water; another doing the same with fire; and another trying number; and so on; and you do not wonder now that all this came to no result except perplexity. But when I affirm that this mode of argument, supposed to have been for ever dissipated by Bacon, still finds favour and flourishes in our very midst, you may fancy I speak a paradox. But I do not; for, in fact, this is the true reason of a whole labyrinth of doubts and difficulties which encompass us on every side every day wherever we go. Instead of generalizing appearances and searching backwards for their unknown system, it is still too much the fashion to assume abstract principles and push forwards to a foregone conclusion. And to show you how this fallacious system penetrates into matters of detail in everyday thought, the present question is a case in point; for, instead of commencing by an examination of the superficial phenomena of the subject,—instead of calmly inquiring first what this restoration is, and in what manner it seems to operate,—some highflying and plausible abstract idea is puffed forth—whether any one will dare to deny the virtue of antiquity, or whether any one would not feel ashamed to impugn the sacredness of our trust, or whether we must not all admit some other such axiom; and upon this quicksand it is demanded that we build, with this breath we are to blow bubble schemes, no matter how visionary; and if the result produces none of that conviction which is the end, it is simply because it has no science in it—no *a posteriori* argument for its base,—our fabric sinks from sight while we build it,—our schemes vanish in thin air while scarcely spoken.

In generalizing, then, the mental phenomena which pertain to the category of the restoration in question, I seem to discern as their system the following: that the value attached to an ancient building is of six species,—serviceable, monumental, patriotic, artistical, art-historical, and archæological.

Value serviceably is that which is attached to the structure when considered as an edifice for present occupation; value monumentally, when considered as a special memorial of present hero worship; value patriotically, when considered as an object of interest in association with past history, or such like; value artistically, when considered as a work of direct beauty; value art-historically, when considered as a record in the past history of design; and value archæologically, when considered as a matter of the fashionable or dogmatical antiquarianism of the time being.

If we be right so far, we have next to examine the particular circumstances of all these various species of value; and, connecting with this the principle of restoration, the result ought to be, more or less, a scientific system of abstract regulations to act upon.

Accordingly, value serviceably is the value of a building as property purely with reference to the purposes of its use; for instance, an ancient church, as property, is valuable for use as a house of worship (demanding by the way a certain amount of what may be called ornament, as a matter of decency); also, an ancient tomb would be valuable as property in any such case as when certain funds or privileges were held on condition of its being kept in existence; and an ancient pump, structurally, would be valuable as property so long as it furnished a water supply of any value; and an ancient gate, so long as a gate in that position might be desirable; and so on. Connect, therefore, with this the principle of restoration.

I consider restoration to operate in four forms:—first (or preliminary), as simple preservation, by those attentions which prevent decay; secondly, as positive partial repair where decay has occurred; thirdly, as total renovation when in ruins; and, fourthly, as the act of improving by anything additional to the original subject; and any case partaking of more than one of these characteristics would